

REMARKS

I. General Remarks

Please consider the application in view of the following remarks. Applicants thank the Examiner for her careful consideration of this application.

II. Disposition of the Claims

Claims 1-41 originally were pending in this application. Claims 1-6 and 20-41 have been canceled. Claims 7-19 are rejected. Claims 7, 9-14, and 17-19 have been amended herein. These amendments are supported by the specification as filed. Applicants respectfully request that the above amendments be entered and further request reconsideration in light of the amendments and remarks contained herein. It should not be assumed that the amendments made herein were made for reasons related to patentability.

III. Remarks Regarding Restriction Requirement

During a telephone conference with the Examiner on June 8, 2007, Applicants made a provisional election without traverse to prosecute the invention of Group II, claims 7-19. Affirmation of this election is hereby made. Accordingly, Applicants have canceled claims 1-6 and 20-41 herein. Applicants reserve the right to pursue these claims as filed in a divisional or other continuing application

IV. Remarks Regarding Rejections Under the Doctrine of Double Patenting

Claims 7-19 are rejected on the ground of nonstatutory double patenting over claims 8-13 of U.S. Patent No. 7,080,688. Submitted herewith is an appropriate terminal disclaimer in compliance with 37 C.F.R. § 1.321 disclaiming the appropriate term. Accordingly, Applicants respectfully submit that the double patenting rejections have been overcome, and respectfully request the withdrawal of these rejections.

V. Rejection of Claims Under 35 U.S.C. §103

A. Claims 7-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen et al. (US 6,209,643) in view of Free et al. (US 3,960,736)

Claims 7-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,209,643 issued to Nguyen et al. (hereinafter "*Nguyen*") in view of U.S. Patent No. 3,967,036 issued to Free et al. (hereinafter "*Free*") With respect to these rejections the Office Action states:

Nguyen et al disclose a method of introducing treatment chemicals

and treating a subterranean formation comprising providing a fluid suspension including a mixture of particulate material such as gravel packing material (See column 8, lines 20-21) in said fluid suspension, a solution of a tackifying compound in a solvent (See column 5, lines 10-13) such as alcohol (See column 4, lines 55-56) and a treatment chemical whereby treatment chemical contacted by said tackifying compound and at least partially coated therewith whereby the tackifying compound retards release of said treatment chemical in said fluid suspension; and depositing the coated particulates in the subterranean formation whereby coated treatment chemical is subsequently released within the subterranean formation (i.e., the tackifying compound is degradable) to treat at the portion of formation in contact therewith (See column 12, lines 33-55). The tackifying compound includes any compound (See column 5, lines 11-12), e.g. a polyester (See column 12, line 58); and treatment chemical include gel breakers such as oxidizers, enzymes or hydrolyzable esters that are capable of producing a pH change in the fluid (See column 4, lines 40-42). The tackifying compound is admixed in an amount of 0.1-3.0 % by weight of the coated particles (See column 6, lines 14-17).

As to claimed solvent, obviously, one of ordinary skill in the art would use a conventional alcohol such as methanol and isopropanol as a solvent in Nguyen et al because Nguyen et al does not limit their teaching to particular alcohols.

Nguyen et al fail to teach that hydrolyzable esters are capable of gel breaking by releasing acid.

Free et al teach that an organic ester which hydrolyzes over a certain time period to release an acid may be used as a breaker of a viscous aqueous solution for the use as a fracturing fluid, as a drilling fluid (See column 1, lines 36-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a hydrolysable ester that releases an acid as a breaker chemical in Nguyen et al since Free et al teach that an organic ester which hydrolyzes over a certain period of time to release an acid is suitable for the use as a breaker of a viscous aqueous fracturing fluid, or a drilling fluid.

It is the Examiner's position that the hydrolysable ester of Free et al in a coated gravel would slowly degrade a filter cake when formed as a gravel pack next to the filter cake because it releases acid. Moreover, it is well settled that the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter.

1985).

As to claims 13 and 19, plasticizers were not addressed because they are optional.

(Office Action, at 5-7) Applicants respectfully disagree.

To form a basis for a § 103(a) rejection, a combination of prior art references must teach or suggest each element in the claim in such a way that enables a person of ordinary skill in the art to make or use the claimed invention. MPEP §§ 2141.01(II) & 2142 (2004). Applicants respectfully assert that the combination of *Nguyen* and *Free* does not teach or suggest each element of claims 7 and 14.

Nguyen fails to disclose each and every limitation of independent claims 7 and 14. *Nguyen* teaches particulates that are coated with a “liquid or solution of a tackifying compound, which coats at least a portion of the particulate upon admixture therewith.” (*Nguyen* at col. 3, ll. 41-43). However, the “treatment chemical” (*e.g.*, a hydrolyzable ester) actually becomes adhered to the tackifying compound. (*See Nguyen* at col. 4, ll. 57-60). This does not teach a particulate that is itself coated with a coating solution comprising an acid-releasing degradable material and a solvent or plasticizer, as recited in claims 7 and 14. Nor does *Free* teach this element. Rather, *Free* merely teaches that an organic ester which hydrolyzes over a certain time period to release an acid may be used as a breaker of a viscous aqueous solution for the use as a fracturing fluid, as a drilling fluid. (*See Free* at col. 1, ll. 36-46). Therefore, one of ordinary skill in the art would not understand from these references, either alone or in combination, to make or use particulates coated with a coating solution comprising an acid-releasing degradable material and a solvent or plasticizer, as recited in claims 7 and 14.

Thus because the combination of *Nguyen* and *Free* does not teach all elements of claims 7 and 14, the combination cannot obviate claims 7 and 14. Since “a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers,” and since claims 8-13 and 15-19 depend, directly or indirectly, from claim 7 or 14, these dependent claims each include the limitations of claims 7 and 14 that neither *Nguyen* nor *Free* teaches or suggests. *See* 35 U.S.C. § 112 ¶ 4 (2004). Therefore, Applicants respectfully assert that claims 7-19 are allowable over the combination of *Nguyen* and *Free*, and respectfully request the withdrawal of the rejections thereto.

B. Claims 7-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen et al. (US 6,209,643) in view of Free et al. (US 3,960,736), further in view of Lee et al (US 6,817,414)

Claims 7-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Nguyen* in view of *Free*, further in view of U.S. Patent No. 6,817,414 issued to Lee et al. (hereinafter "*Lee*"). With respect to these rejections the Office Action states:

Nguyen et al in view of Free et al are applied here for the same reasons as above. Nguyen et al in view of Free et al teach that treatment chemicals that release acid can be used to degrade a filter cake.

Lee et al teach that gravel having coating comprising chemicals that slowly hydrolyze and release an acidic by-product (See column 3, lines 6-15), e.g. lactic polymer (See column 3, lines 20-28) can be used to degrade a filter cake (See column 2, lines 52-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used acid releasing treatment chemicals coated gravel of Nguyen et al in view of Free et al for degrading a filter cake since Lee et al teach that chemicals that slowly hydrolyze and release an acidic by-product are suitable to be used to degrade a filter cake.

(Office Action, at 7) Applicants respectfully disagree.

To form a basis for a § 103(a) rejection, a combination of prior art references must teach or suggest each element in the claim in such a way that enables a person of ordinary skill in the art to make or use the claimed invention. MPEP §§ 2141.01(II) & 2142 (2004). Applicants respectfully assert that the combination of *Nguyen*, *Free*, and *Lee* does not teach or suggest each element of claims 7 and 14.

As discussed above in Section V (A), the combination of *Nguyen* and *Free* fails to disclose each and every limitation of independent claims 7 and 14. Nor does *Lee* teach what the combination of *Nguyen* and *Free* lacks. Rather, *Lee* merely teaches the coating of a proppant with a polymerized alpha-hydroxycarboxylic acid. (See *Lee* at col. 3, ll. 6-8). This does not teach a particulate that is itself coated with a coating solution comprising an acid-releasing degradable material and a solvent or plasticizer, as recited in claims 7 and 14. Therefore, one of ordinary skill in the art would not understand from these references, either alone or in combination, to make or use particulates coated with a coating solution comprising an acid-releasing degradable material and a solvent or plasticizer, as recited in claims 7 and 14.

Because the combination of *Nguyen*, *Free*, and *Lee* does not teach all elements of claims 7 and 14, the combination cannot obviate claims 7 and 14. Since “a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers,” and since claims 8-13 and 15-19 depend, directly or indirectly, from claim 7 or 14, these dependent claims each include the limitations of claims 7 and 14 that neither *Nguyen*, *Free*, nor *Lee* teaches or suggests. See 35 U.S.C. § 112 ¶ 4 (2004). Therefore, Applicants respectfully assert that claims 7-19 are allowable over the combination of *Nguyen*, *Free*, and *Lee*, and respectfully request the withdrawal of the rejections thereto.

Furthermore, to the extent the Examiner has relied on *Lee* in combination with *Nguyen* and *Free*, the Examiner has failed to establish a *prima facie* case of obviousness with respect to such combinations. A *prima facie* case of obviousness based on a combination of references requires a suggestion or motivation in the prior art references to make the specific combination of elements claimed by Applicants. MPEP § 2143.01. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP § 2143.01. In the present case, the Examiner has not sufficiently established that it would have been obvious to one of ordinary skill in the art to combine the *Lee* reference with the *Nguyen* reference. The method in *Lee* does not lend itself for on-the-fly operations. (See *Lee* at col. 3, line 56 - col. 4, line 11). In order for an acid-releasing degradable material to be suitable for on-the-fly coating onto a particulate, it must be in a substantially liquid, flowable form. Thus it would be improper to combine this reference with *Nguyen* which does lend itself for on-the-fly operations. (See *Nguyen* at col. 5, ll. 10-13). For at least these reasons any rejections based on *Lee* in combination with *Nguyen* and *Free* are improper.

Accordingly, Applicants request that any rejections of Applicants' claims over *Lee* in combination with *Nguyen* and *Free* be withdrawn.

VI. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the cited references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The amendments and example distinctions discussed by Applicants are sufficient to


overcome the rejections of the claims.

SUMMARY

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

The Commissioner is hereby authorized to debit Baker Botts L.L.P.'s Deposit Account No. 02-0383, Order Number 063718.1357, in the amount of \$130.00 for the terminal disclaimer fee under 37 C.F.R. § 1.20(d). Should the Commissioner deem that any additional fees are due, including any fees for extensions of time, the Commissioner is authorized to debit Baker Botts L.L.P.'s Deposit Account No. 02-0383, Order Number 063718.1357, for any underpayment of fees that may be due in association with this filing.

Respectfully submitted,

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